- M is a hydrogen atom, an ammonium ion, a monovalent metal ion or an equivalent of a divalent metal ion of the groups Ia, IIa, IIb, IVa or VIIIb of the Periodic Table of the Elements;
 - R¹ is OH or NR⁴R⁵, where in R⁴ and R⁵ independently of one another are H or C₁-C₆-alkyl;
 - R² is H or an alkyl, alkenyl, cycloalkyl or aryl group, [it being possible for these groups to have] wherein the alkyl, alkenyl, cycloalkyl, and aryl group are unsubstituted or substituted with 1, 2 or 3 substituents which are chosen independently of one another from C_I-C₆-alkyl, OH, O-C_I-C₆-alkyl, halogen and CF₃; and
 - R³ is COOM, SO₃M, COR⁴, CONR⁴R⁵ or COOR⁴[, where M, R⁴ and R⁵ are as defined above, or, if R² is aryl, which may be unsubstituted or substituted as defined above, as also H,]; or
 - is H, provided that when R³ is H R² is unsubstituted aryl or aryl substituted with 1, 2 or 3 substituents which are chosen independently of one another from C₁-C₆-alkyl, OH, O-C₁-C₆-alkyl, halogen and CF₃.

[and the salt thereof.]

- 2. (Amended) [A] <u>The</u> sulfine acid compound as claimed in claim 1 [of the formula (I)], where in
- M is an ammonium or alkali metal ion or an equivalent of an alkaline earth metal ion or zinc ion.
- 3. (Amended) [A] The sulfinic acid compound as claimed in claim 1 [or 2 of the formula (I)], where in

R¹ is OH or NH₂



(Amended) [A] The sulfinic acid compound as claimed in claim 1 [of the formula (I)], wherein

 R^2 is a hydrogen atom or an alkyl or aryl group which [may have] are unsubstituted or substituted with one or two hydroxyl or alkoxy substituents.

5. (Amended) [A] The sulfinic acid compound as claimed in claim 1 [of the formula (I)], where in

R³ is COOM or COOR⁴[, where M and R⁴ are as defined in claim 1].

6. (Amended) [A] <u>The</u> sulfinic acid compound as claimed in claim 1 [of the formula (I)], where<u>in</u>

M is an alkali metal ion or an equivalent of an alkaline earth metal ion or zinc ion;

 R^1 is OH or NH_2 ;

R² is H or alkyl; and

R³ is COOM or COOR⁴, [M being as defined above and] wherein R⁴ [being] is H or C_1 - C_6 -alky.

7. (Amended) [A] <u>The</u> sulfinic acid compound as claimed in claim 4 [of the formula (I)], where<u>in</u>

R² is aryl, which [may have] is unsubstituted or substituted with one or two hydroxyl or alkoxy substituents; and

 R^3 is H

8. (Amended) [A] The sulfinic acid compound as claimed in claim 7 [of the formula (I)], where in

 R^2 is hydroxyphenyl or C_1 - C_4 -alkoxyphenyl.

9. (Amended) [A] The sulfinic acid compound as claimed in claim 1 [of the formula (I)], wherein

M is an alkali metal ion or an equivalent of an alkaline earth metal ion or zinc ion;

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Chicago, Illinois 60606 Phone: 312-913-0001



- R^1
 - is OH or NH₂;
 - \mathbb{R}^2
- is hydroxyphenyl or C₁-C₄-alkoxyphenyl; and
- R^3
 - R^3 is a hydrogen atom.
- 10. (Amended) [Compounds] A compound of the formulae [(M = Na, K, Mg, Ca, Zn)]:

$$\begin{array}{c} \text{CH}_3\\ \text{MO-SO} \overset{\text{CH}_3}{\longleftarrow} \text{COOH}\\ \text{OH} \end{array}$$

wherein M is Na, K, Mg, Ca, Zn and R⁴ is CH₃ or C₂H₅.

11. (Amended) [A] The mixture of a sulfinic acid compound as claimed in one of claims 1 to 10 with the sulfonic acid corresponding to the sulfinic acid compound or the salt thereof and with or without the corresponding sulfite.

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(Amended) [A] The mixture as claimed in claim 1/1 having the following composition:

Compound of the formula (I)

20-99% by weight

Sulfonic acid corresponding to

the compound of formula (I)

0-60% by weight

 M_2SO_3

0-40% by weight

13. (Amended) [A] The mixture as claimed in claim 12 having the following composition:

2-Hydroxyphenylhydroxymethylsulfinic

acid, sodium salt:

61-98% by weight

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2-Hydroxyphdnylhydroxymethylsulfonic acid, sodium salt: 2-15% by weight Sodium sulfite: 0-37% by weight 14. (Amended) [A] The mixture as claimed in claim 12 having the following composition: 4-Methoxyphenylhydroxymethylsulfinic acid, sodium salt! 60-98% by weight 4-Methoxyphenylhydroxymethylsulfonic acid, sodium salt 2-15% by weight Sodium sulfite: 0-38% by weight (Amended) [A] The mixture as claimed in claim 1/2 having the following composition: 2-Hydroxy-2-sulfinatoacetic acid, disodium salt: 40-73% by weight 2-Hydroxy-2-sulfonatoacetic acid, disodium salt: 2-7% by weight Sodium sulfite: 0-33% by weight Water: 5-30% by weight (Amended) [A] The mixture as claimed in claim 1/2 having the following composition: 2-Hydroxy-2-sulfinatoacetic acid, zinc salt: 20-70% by weight TO261 2-Hydroxy-2-sulfonatoacetic acid, zinc salt: 5-60% by weight 5-30% by weight water: (Amended) [A] The mixture as claimed in claim 12 having the following composition: 2-Hydroxy-2-sulfinatopropionic acid, Toala 38-70% by weight disodium salt: 2-Hydroxy-2-sulfonatopropionic acid,

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disodium salt:

5-30% by weight

Sodium sulfite:

0-33% by weight

Water:

5-30% by weight •

(Amended) [A] The mixture as claimed in claim 1/2 having the following composition:

Ethyl 2-hydroxy-2-sulfinatopropionate,

sodium salt:

60-80% by weight

Ethyl 2-hydroxy-2-sulfonatopropionate,

sodium salt:

0-5% by weight

Sodium sulfite:

0-5% by weight

Water:

5-20% by weight.

Please add new claims 23-25.

A method of reducing a chemical compound, the method comprising contacting the compound with a sulfinic acid compound according to any one claims 1-10 under conditions that permit reduction.

(New) The method according to claim 2/4, wherein the sulfinic acid compound is a cocatalyst in emulsion polymerization or redox patalyst system in plastics production.

(New) The method according to claim 24, wherein the sulfinic acid compound is a reducing agent component for textile printing, in textile bleaching or vat dyeing or a reducing bleach for mineral refining or fiber finishing.

Respectfully submitted,

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McDonnell Boehnen Hulbert & Berghoff 300 South Wacker Drive, 32nd Floor Chicago, Illinois 60606 Phone: 312-913-0001

